



# Office Action Summary

Application No.

08/691,434

Applicant(s)

Yamazaki et al.

Examiner

M. Wilczewski

Group Art Unit

1107



☒ Responsive to communication(s) filed on Aug 2, 1996

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 0 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 8, 11-13, and 15-73 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☐ Claim(s) \_\_\_\_\_ is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☒ Claims 8, 11-13, and 15-73 are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☒ received in Application No. (Series Code/Serial Number) 08/160,909

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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***Election/Restriction***

This application contains claims directed to the following patentably distinct species of the claimed invention: a first species of the claimed invention as recited in claims 8, 11, 12, 13, 15, 24, and 25 in which the semiconductor processing apparatus includes a film formation apparatus, a laser processing apparatus, and a vacuum chamber, a second species of the claimed invention as recited in claims 16, 17, 18, 19, 20, 24, and 25 in which the semiconductor processing apparatus includes a vacuum chamber, an ion introducing apparatus, and a laser processing apparatus, and a third species of the invention as recited in claims 21-25 in which a laser processing apparatus includes an ion doping apparatus, a first preliminary chamber, an etching apparatus, a second preliminary chamber, and a laser processing apparatus.

**In addition, if Applicants elect for prosecution the first species of the invention, that is, the invention as recited in claims 8, 11, 12, 13, 15, 24, and 25, Applicants must also elect one of the following sub-species for prosecution:**

a **first sub-species** as recited in claims 26-31 in which the semiconductor processing apparatus includes a film formation apparatus, a laser processing apparatus, and a vacuum chamber and in which the substrate is “substantially” square,

a **second sub-species** of the claimed invention as recited in claims 32-37 in which the semiconductor processing apparatus includes a film formation apparatus, a laser processing

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apparatus, and a vacuum chamber and in which the rectangular-shaped laser beam has a length greater than the width of the “substantially” square substrate,

a **third sub-species** of the invention as recited in claims 38-43 in which the semiconductor processing apparatus includes a film formation apparatus, a laser processing apparatus, and a vacuum chamber and in which the rectangular-shaped laser beam irradiates the whole surface of the substrate, or

a **fourth sub-species** of the invention as recited in claims 44-49 in which the semiconductor processing apparatus includes a film formation apparatus, a laser processing apparatus, and a vacuum chamber and in which the laser processing apparatus includes a chamber, a gas inlet and exhaust means for controlling pressure and atmospheric composition within the chamber, and a laser.

**Likewise, if Applicants elect for prosecution the second species of the invention, that is, the invention as recited in claims 16, 17, 18, 19, 20, 24, and 25, Applicants must also elect one of the following sub-species:**

a **first sub-species** as recited in claims 50-55 in which the semiconductor processing apparatus includes a vacuum chamber, an ion introducing apparatus, and a laser processing apparatus and in which the substrate is “substantially” square,

a **second sub-species** as recited in claims 56-61 in which the semiconductor processing apparatus includes a vacuum chamber, an ion introducing apparatus, and a laser processing

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apparatus and in which the rectangular-shaped laser beam has a width greater than the width of the “substantially” square substrate,

a **third sub-species** as recited in claims 62-67 in which the semiconductor processing apparatus includes a vacuum chamber, an ion introducing apparatus, and a laser processing apparatus and in which the rectangular-shaped laser beam irradiates the whole surface of the substrate, or

a **fourth sub-species** as recited in claims 68-73 in which the semiconductor processing apparatus includes a vacuum chamber, an ion introducing apparatus, and a laser processing apparatus and in which the laser processing apparatus includes a chamber, a gas inlet and exhaust means for controlling pressure and atmospheric composition within the chamber, and a laser.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, the species of claim 8 is generic to the sub-species of claims 26, 32, 38, and 44, and the species of claim 16 is generic to the sub-species of claims 50, 56, 62, and 68. In addition, the subspecies of claim 26 is generic to the sub-species of claim 32 and the sub-species of claim 50 is generic to the sub-species of claim 56.

Applicant is advised that a response to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable

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thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently


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named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(h).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Wilczewski whose telephone number is (703) 308-2771. The examiner can normally be reached on Monday and Thursday from 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Niebling, can be reached on (703) 308-3325. The fax phone number for this Group is (703) 305-3600.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

  
MARY WILCZEWSKI  
PRIMARY EXAMINER  
GROUP 1100